



US Army Corps  
Of Engineers®  
Europe District



United States Army  
Europe

# "YOU SPILL, YOU DIG!"



AN ENVIRONMENTAL FLASHCARD FOR DEPLOYMENT

Contract No. DACA90-97-D-0016

D.O. 0007

## PREVENTION

Vehicle Maintenance and Fueling Points, HW Collection Points and HM Storage & Supply Areas may not be set up at your deployment destination. So PLAN to build your areas to prevent HM accidents before they occur. Remember the following:

**HM/HW AREA LOCATION** - Locate HM/HW areas away from living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where HM are used.



**MATERIAL SAFETY DATA SHEET (MSDS)** - Keep MSDSs for each HM stored or collected at HM/HW areas.

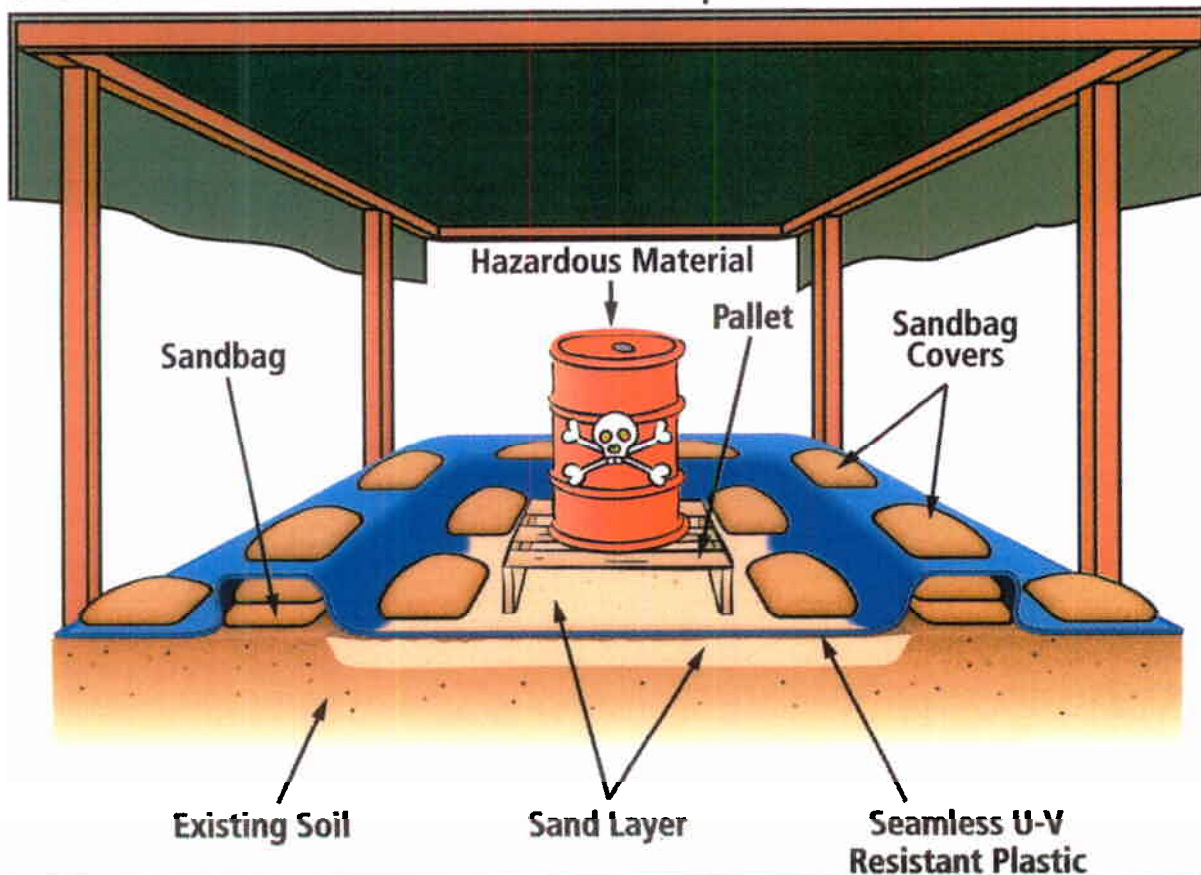
**UNIT ENVIRONMENTAL SOP & SPILL RESPONSE PLAN** - Place SOPs and Spill Response Plans at each HM/HW area.

**COMPATIBILITY OF MATERIALS** - Store and/or dispose of each class of HM/HW separately. MSDSs describe the classification of HMs. Four common classifications include Flammable (fuels), Corrosives (acids), Reactive (explosives) and Toxic (insecticides).

**BEFORE** you deploy, plan to pack drip pans, rags, plastic, dry sweep, absorbent, and pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

**SECONDARY CONTAINMENT** - All liquid HM/HW must have secondary containment. In order for it to be effective it must:

1. Hold 10% of the total HM/HW stored or 100% of the largest container.
2. Have sand and/or pallets placed in certain areas to protect the liner.
3. Have overhead cover -- see example below.





You should continually keep your HM/HW areas clean and orderly by applying the principals of Monitoring and Housekeeping. An easy way to remember what to check, is to remember your CHECK list:

### Containment:

- \_\_\_ Ensure that secondary containment is used and in good condition.
- \_\_\_ Empty water within secondary containment on a regular basis and dispose of it as HW - at the HW collection point.

### HM/HW locations:

- \_\_\_ Make sure the locations of your HM/HW are well chosen.
- \_\_\_ Put up warning signs and keep them clean and orderly.

### Environmental Documentation:

- \_\_\_ Maintain MSDSs for each HM and update Unit SOPs and Spill Response Plans regularly.

### Containers:

- \_\_\_ Check condition of containers and keep containers of incompatible materials in proper order.

### Kits:

- \_\_\_ Place Spill Kits, First Aid Kits and Emergency Response Kits in the vicinity of HM/HW areas.

• CHECK the Environmental Handbook for Deployment for more detailed reminders of what to keep tabs on during deployment.

# RESPONSE

Be prepared to respond immediately to any spill situation. Keep your Unit's Environmental SOP and Spill Response Plan (SRP) readily available at the main HM/HW areas. The SRP should ensure that the following measures are implemented, if not then implement them yourself:

**PERSONAL PROTECTIVE EQUIPMENT (PPE)** - At the entrance of every HM/HW area, keep a supply of PPE to protect hands, eyes, skin, ears, head, feet and lungs. If you are unsure about which items you need, consult the Material Safety Data Sheet (MSDS) for the HMs that you are using.

**MSDS** - Make sure that MSDSs are available in order to REACT to spills safely and effectively.

**SPILL STATIONS** - Maintain spill response equipment at a station near (not inside of) HM/HW areas. They should contain: First Aid Kits, Fire Extinguishers, Spill Response Kits, and Emergency PPE.

**TRAINING** - Improve your readiness by practicing the SPILL DRILL on a regular basis and be sure to know the spill reporting process.



Respond to spills, major or minor, immediately in order to eliminate hazards that could cause personal injury and/or environmental damage. In any spill situation:

1. Safety First! -- Protect yourself by using PPE, including goggles, gloves, and suits. THEN...

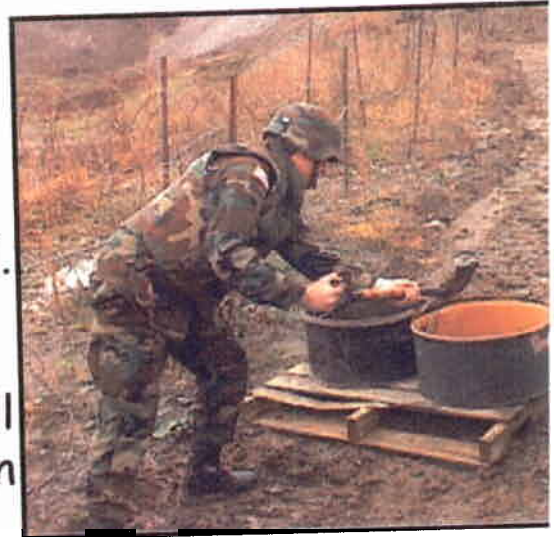
2. Do the SPILL DRILL -- REACT:

### REMOVE THE SOURCE

Plug the drip or leak and stop the spill.

### ENVELOP THE SPILL

Place absorbent booms around the spill area or build an earthen dam, when appropriate, around the spill.



### ABSORB/ACCUMULATE

Place appropriate absorbent material (dry sweep, pads, etc.) around the spill in the middle of the boomed-off area.

### CONTAINERIZE THE HW

Use a shovel to place contaminated materials (including soil, boom pads or other materials) in a plastic bag or a waste drum.

### TRANSMIT A REPORT

If a spill is too large to handle alone - REACT as best you can and get help!